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ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Dysentery*, by F. K. BAILEY, M. D., Almont, Mich.

DYSENTERY has prevailed to considerable extent in this vicinity during the past season, and in one locality proved very fatal. The disease was ushered in, in most cases, by a chill, soon succeeded with fever. The stools were generally similar to those in common diarrhoea, for a few hours, but soon became bloody; while, in some instances, the first unnatural discharge was composed wholly of bloody mucus. Tormina and tenesmus severe; abdomen hot, very tender on pressure, and, after a short time, more or less distended. Sometimes no external change could be detected. Tongue coated, urine scanty and red, skin hot and dry, and the pulse frequent, but feeble. Nausea and vomiting at first, in some cases, but subsiding after a day or two. Dysuria was a frequent attendant, and often very severe. Two-thirds of the cases occurred among children. The fatal cases terminated in from four to seven days, and in those that recovered, the disease continued from fourteen to twenty-one days, and sometimes longer; but generally terminating by crisis, as in fevers of the same type, at which time the alvine discharges would assume a natural appearance, and all the functions become established. The region where the disease was most severe, extends about two miles on an east and west line, and did not reach more than a mile North or South from that line. In the S. W. limit of this district is a small stream, upon which there are

three mill ponds, as near each other as they can well be, overflowing more than one hundred acres of land, from which none of the timber had been removed. For twelve years, fevers common in miasmatic districts, have prevailed in this neighborhood.

The treatment most generally adopted, was the common mode—Calomel in alterative doses, or blue mass, combined with Opium, and Ipecac., followed with laxatives, &c. On watching the effects of this course I came to the conclusion, that, however well adapted it might be in ordinary cases, in this it was positively injurious; as there seemed to be a general epidemic influence operating to modify the type, rendering the disease of more than ordinary malignancy.

There was a disturbance of all the functions, with a low grade of local inflammation tending to deep ulceration and gangrene.

The alterative plan might be calculated to benefit the case as far as the general derangement was concerned, still it operated badly rather than otherwise, upon the inflamed mucous membranes; and furthermore, the local inflammation would terminate in mortification, rendering the case fatal before the constitutional difficulty would be reached by general remedies. Therefore, it seemed the most rational to direct our curative efforts to obviate the local diseased action, trusting to the efforts of nature to dispose of the general trouble.

I accordingly decided to use nothing that would act as cathartic or even laxative, but endeavored to alleviate pain, and suspend the peristaltic action of the intestines. To effect this, I gave Opium in doses sufficiently large, and often repeated, to relieve pain without inducing excessive narcotic effects. I also gave a saturated solution of common salt in strong vinegar, without being diluted, in doses of a tea-spoonful (or more if it could be borne) once in fifteen minutes until the tenesmus was relieved, which would generally take place in less than two hours, and in some cases almost instantly.

If an antacid was indicated, Sup. Carb. Soda, or Carbonate of Ammonia were most useful. As a diuretic, Spts. Nitri Dulcis was given, and the dysuria was generally relieved by a decoction of Uva Ursi. Enemata of cold water, and cloths wet in water of a temperature most grateful to the patient, laid upon the abdomen,

were productive of beneficial results. The diet best suited to the case was equal parts of scalded milk and water, which would also serve as drink, with the use of Slippery-elm in water.

Nausea and vomiting were relieved by sinapisms to the epigastrium. Blistering the abdomen was dispensed with, not that it would not be beneficial in itself, but because the constant irritation on the patient's frequent getting up, would overbalance its good effects.

By following the plan above-mentioned, I found the patient suffered less pain in the bowels, the tenesmus less severe, not being felt to any amount except when on the stool. He could sleep most of the time, and it is well known by all conversant with dysentery, that tenesmus when constant is the most debilitating attendant; and it will be more or less constant when kept alive by frequent catharticizing. I would remark, in reference to the salt and vinegar, that my patients would invariably call for it, when the tenesmus was about to return, so satisfactory were its effects. How it operates to relieve that distressing sensation, I will not pretend to explain. There are more curative qualities in common salt than is generally admitted; and were it a rare and costly chemical, it would undoubtedly be more popular as a remedy among the profession than it now is. Salt and vinegar in combination are well known as a topical remedy in inflammation and ulceration of the fauces, and it probably acts upon the inflamed mucous membrane of the intestines in a similar manner.

A common error in the treatment of dysentery seems to be the practice of administering laxatives to remove the vitiated secretions from the upper intestines, when the probability is, that all that does pass off as a result of their action, is produced by the irritation of the medicine itself; and, in addition to this effect, the peristaltic action of the diseased portion of the alimentary canal, is increased, when perhaps by the effect of Opium, it may have been quieted. Opium acts not only by keeping the intestines still, but also by suspending all secretions which might irritate in their passage downwards.

Prof. Tully used to say in reference to dysentery: "Give Opium until costiveness is produced," and I have often found it a valuable hint. Should costiveness be produced it will never be necessary

to give a laxative, but suspend the Opium, and the bowels will act soon enough.

There were no post-mortem examinations made in any case, in this district, but judging from the mode of attack, there must have been congestion of the mucous membrane at the time of the chill. Inflammation soon followed attended with bloody stools. In some cases reaction did not come up, but death succeeded the congestive stage. In these cases there were symptoms indicating cerebral congestion. There is every reason to conclude, that miasmatic influence operated strongly in producing the disease, or modified the predisposing causes, were they traceable to any other source than that of a paludal nature. One thing is certain, that marsh miasm has a great influence in modifying every disease, and such being the case, great care is requisite to detect any change produced by such a cause.

ARTICLE II.—*Chloride of Sodium in Visceral Obstructions*, by C. W. DAVIS, M. D., Carlisle, Indiana.

THE sequelæ of long and protracted cases of intermittent fever are (as it has long since been determined) visceral indurations, and in many cases an anasarcal condition of the general system. This is more apt to be the case when the disease assumes the quartan type, or as it is vulgarly termed, third day chills. These sequelæ are, I am convinced (from the best of reasons and testimony), brought about too frequently from the injudicious use of Quinine. I state this merely as a matter of fact, not intending at this time to substantiate the conclusion from physiological evidence.

The consequences of chronic ague will, to a great degree, be found very obstinate to remedy, and frequently dangerous in their results. After our common alterative and resolvent remedies, febrifuges, &c., seem to have lost every virtue, the Chloride of Sodium will be found very efficient in arresting the disease permanently—acting as a powerful discutient—resolving the visceral enlargements—and bringing about a normal condition of the digestive viscera. I was induced to try this remedy, after the use of Mercury, Quinine, Iron, Iodine, &c., failed to do any good.

The first case was a lady of about fifty years of age, of a nervous-lymphatic habit. She had been laboring under quartan ague for

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some nine months, occasionally checking the paroxysms with our common febrifuges, Quinine, Iron, &c.; but finally these remedies were found inefficient, and she applied to me for remedial aid.

The diagnostic marks of this case were indicative of a vitiated and depraved condition of the circulatory, nervous, and glandular systems, connected, as is usual, with symptoms of hysteria. She complained of having no appetite, of irregularity of the bowels, and an obtuse pain in the region of the spleen and liver, (these viscera being in a state of complete induration). I prescribed various remedies, and failing to do any good, made use of the Chloride of Sodium, more from its resolvent than tonic powers.

In some nine days my patient was free from visceral enlargements, and in possession of a remarkably fine appetite. This case, as well as a number of consecutive ones, of the same cachectic habits, being restored to health by the Chloride of Sodium, bears ample testimony of the utility to this remedy in the treatment of such cases.

I take as much of the Chloride as can be dissolved in the best Cogniac Brandy, and direct the patient to take a tea-spoonful three times per day before eating, using the saline bath two or three times during the week.

ARTICLE III.—*Alcohol as a Remedy for the Poison of the Rattlesnake*, by Dr. W. K. HOPKINS, Fox Lake, Wis.

In the Nov. number of the North-Western Medical and Surgical Journal, I read an article on the use of Alcohol as a remedy for the poison of the Rattlesnake. On the mountain-tops of Northern Pennsylvania and Southern New York, the Rattlesnake, the most venomous of its kind in our northern latitudes, is frequently met with. Deaths were not unfrequent; but the accidental discovery that Brandy was a sure antidote, has lessened the fears of the inhabitants of at least a portion of that section, for they find, when timely administered, that it cures in every instance. I speak confidently from my own experience.

I will give you two cases; one occurring in Bradford County, Pennsylvania, the other in the town of Fox Lake, Dodge County, Wisconsin.

In 1840, near mid-summer, I was called to visit W. P., reported

to have been bitten by a large Rattlesnake, in the town of Ridgebury, Pa. On my arrival, I learned from his friends that he was bitten near a mile from home, on the hill-side, and that his companions corded the limb and hurried him to his house. He was a blacksmith by trade, quite dissipated, and now very much alarmed. The leg was very much swollen below the ligature. He complained of great pain in and about the wound, which was an inch or more above the inner ankle, a mere puncture, as if done with a needle. His pulse feeble and intermitting; dimness of vision; nausea, with slight vomiting; the color of the leg growing more livid.

I found he had drank no spirits that day (Sunday,) and I ascribed, in part, his prostration to that cause, knowing his habits, and to his extreme fright. I consequently ordered him half a wine glass of Brandy; in five minutes I repeated it, carefully observing its effects. In ten minutes I gave him a full wine glass, and in twenty minutes, finding his pulse much stronger, more regular, and the countenance losing much of its horror, I again repeated the dose of Brandy, a full glass. In the meantime, however, I had removed the ligature from the limb, and cauterized the wound with Nit. Argent., having previously made an incision to the bottom of the wound with a lancet.

It is important, when we depend on external applications, to reach the bottom of the puncture made by the tooth, as it is a well known fact that the poisoned fang is tubular, and the virus is injected through it into the extreme depth reached by the tooth.

It was near two o'clock P. M. when I reached my patient, and by six o'clock he had taken a full pint of Brandy. I gave directions that the limb be washed in cold vinegar and water, and to give him Brandy every two hours, until I should see him. He now expressed confidence in his recovery; he said his vision was clear, his faintness had left him, and the nervous energy, at first much prostrated, was in a measure restored. The leg, however, was much tumefied, but not painful; the swelling had not extended.

In about eighteen hours I visited my patient again, and found he had passed the night sleeping more than half the time; somewhat thirsty, slight nausea, but he was sitting up, and said he felt quite well. The swelling of the limb had very much subsided;

his vision remained perfect; pulse regular, although accelerated. I gave him a tonic, added the Acetate of Lead to the lotion for the limb, and left him. The next Saturday he visited our village, as well as ever.

I have had one case in this neighborhood. The daughter of A. H., a young girl of ten or eleven years old, was bitten by a Rattlesnake, just forward of the inner ankle. The parents had corded the limb, and had to send five miles for aid. Taking sometime to obtain a messenger, it was at least two hours after the accident before I saw my little patient. Not to be too prolix; all the symptoms of the virus taking effect were present—swollen limb, feeble fluttering pulse, great nervous prostration, dimness of vision, &c. It took another half hour before we obtained Brandy. I finally gave her a large table-spoonful every ten minutes, until she was fully under its influence, and it was remarkable to see, after taking three or four doses, the change in the action of the heart. No doubt dependent on the energy given to the nervous system, the pulse became more regular and fuller; the countenance, before flushed and anxious, became calm in its expression; the child, when I arrived, could not distinguish one from another across the room; the vision was improved, although yet imperfect. I repeated the Brandy from time to time, at intervals of thirty or forty minutes. I made the usual external applications, cauterized the wound, &c. Next day I found her out of danger. She could walk from the bed to a chair without pain or difficulty, although the limb was slightly tumefied. In a few days she had perfectly recovered.

I think all the symptoms attending the bite of the Rattlesnake can be accounted for from its prostrating effects on the nervous system; maintain the sensorial power, and you overcome the consequences of the venom.

ARTICLE IV.—*Cured by the Kick of a Horse*, by G. S. CRAWFORD, M. D.
Joliet, Ill.

SOME eight years ago, I was called on by a farmer residing in this neighborhood, a healthy muscular man of active habits, aged about thirty-five, for advice respecting varicose veins in the left lower extremity. I found the veins considerably distended, causing no pain nor uneasiness. He said he had a constant dread of their

giving way. I advised the use of a bandage or laced stocking, which he did not use. Time passed, and although intimate with and frequently meeting him, I heard no more from him on the subject, until a few days past. He told me that about four months past he had had a kick from a horse on the inner side of the left thigh, a few inches above the knee. This was followed by slight swelling and pain. Soon afterwards he perceived that the veins, formerly troublesome, were no longer so, and in about ten days they had disappeared. Such is his story of Horse Surgery. At present the limb offers no appearance of disease.

SELECTIONS.

From the London Lancet.

On a Case of Poisoning by Two Ounces of Arsenic; Recovery. By THOMAS ERYANT, M. R. C. S., &c.

W. C., aged thirty, single, a butcher, and a notorious drunkard, after having received some act of apparent unkindness from an aunt from whom he had "expectations," was induced to poison himself; and on the evening of July 11th, at half-past nine P. M., I was called to see him. On my arrival I found him quite drunk, could not gain any information from the friends present, and only elicited from him that he had taken about three grains of arsenic a quarter of an hour previously. As there were no symptoms of poisoning present, I returned home and gave him, immediately, an emetic of a scruple of ipecacuanha with one grain and a half of tartarized antimony. On my visit to him at half-past eleven P. M., I learnt, from a friend who was absent when I first called, that he had certainly taken *at least two tablespoonfuls of arsenic*. The emetic had acted immediately, in some measure had sobered him, and had brought up a quantity of dark-brown flaky fluid, which, on analysis, contained abundant arsenic. The man was very drowsy; skin moist; pupils natural; complained of pain on pressure over the pit of the stomach; tongue foul, but not injected; bowels purged once of a very fluid, foetid stool; pulse 100, full and strong. After hearing the true history of the case, and as there were no symptoms of vomiting, I applied the stomach-pump, injecting barley-water (the only thing at hand) till it returned almost clear. The fluid withdrawn was more opaque, contained some brown curdy material and some arsenic, but not more than ten grains. Not feeling satisfied with this result, I ordered one scruple of the sulphate of zinc every two hours until I saw him at half-past eight A. M. the following morning. I then found that he had taken four doses of the zinc, had vomited considerably after each dose, but not continually; the fluid rejected was clear, with brown curdy flakes suspended in it, (containing arsenic,) and on pouring off the supernatant fluid, the arsenic collected was about sufficient to cover a shilling. The man was bathed in sweat, experienced slight pain in the abdomen, increased on pressure, but at times very severe; there was but little dryness of the throat; tongue foul and slightly injected; bowels purged three times; the stools loose and of a dark color; pulse 100, full, but weak; and the patient expressed himself as feeling "tolerably well." The hydrated oxide of iron was given in doses of two ounces every two hours, and a dose of castor-oil exhibited. Nine P. M.: Nausea, but no vomiting since eleven A. M.; still slight abdominal pain;

tongue foul, but very slightly injected; bowels have been open three times with pain; motions very offensive, of a dark color, and one looked bloody; pulse 100, full, and of more power.

July 13th.—Twelve at noon: Passed a good night; has still pain over the abdomen, increased on pressure; tongue the same; bowels have acted twice, but the stools were thrown away; skin moist; no perceptible dryness or redness of the throat; pulse 96, full, and of good power; indeed, the man says he is "nearly well." Continue with medicine.

14th.—Altogether improved; pain in abdomen less; skin moist; tongue cleaner and less injected; no nausea; bowels open twice, and motions loose, very offensive and dark colored; pulse the same. Ordered, spirit of nitrous ether, two drachms, tincture of henbane, one drachm and a half, water, six ounces; take one-fourth three times a day.

15th.—Still improving; no tenderness of the abdomen; tongue cleaner; bowels have not been opened; pulse 96, and natural. Castor-oil, one ounce at bed-time; repeat mixture.

16th.—Bowels opened four times, and motions contained scybalæ and blood; there is no pain in the abdomen, not even on severe pressure; tongue foul, but not injected; skin cool; pulse natural. Repeat oil.

17th.—Bowels opened twice, stools depositing a white powder, and contained blood; otherwise much improved.

18th.—Stools natural, but loose.

21st.—Has continued daily to improve; motions healthy and solid; and indeed may be considered well.

Remarks.—The questions which naturally arise in the mind of any one on the perusal of the above case would be, first,—Did the patient take *arsenic*? and secondly, What *quantity* did he really take? Now, in answer to these natural queries, I must add, that a friend of the man had a few days previously given him a packet containing about *four ounces* of arsenic, for the purpose of destroying vermin; that this packet had been placed upon a certain shelf in the stable, and that the friend had seen it there unopened on the morning of the day of the attempted suicide. On the discovery of the attempt, this same paper containing the arsenic was found at the feet of the patient, he having dropped it on hearing some one enter his room, with only about *one* tablespoonful in it. This was immediately taken by the party who discovered it to a neighboring chemist, who, unfortunately, after mixing it in water, and not knowing what it was, or its history, threw it away on some stones before his shop.

Now, here seems a tolerably clear account that the packet contained originally about *four ounces*; none had been used, as the patient afterwards informed me; that little had fallen in the room, as none had been noticed; and the small remainder leaves a deficit

of between two or three ounces; and added to this, there is the firm assertion of the friend who had been with him, and gave him originally the poison, that the quantity at least taken was two tablespoonfuls; and the man himself says that he took all that was in the packet originally, with the exception of what was found afterwards. The quantity which was left was specified to me by the chemist and the man who took it to him, on several different occasions, as certainly not more than one tablespoonful.

Not feeling satisfied with this account, I thought some mistake must have been made with respect to the strength of the powder taken. I therefore had the powder which the chemist had thrown away upon the flag-stones before his shop collected, and through the kindness of Dr. Odling, of Guy's Hospital, who analysed it for me, learnt that it contained ninety-five per cent. of arsenious acid, the remainder being sand, which most probably was added by the scraping of the stones during the collection of the powder. Being then obliged to recognise the fact that at least two ounces of arsenious acid had been swallowed, the grand difficulty remains, to account for the mildness of the symptoms which a large dose of such an irritant poison would naturally be expected to occasion. Such a result I find quite unable to accomplish, and only suggest the question, whether the man, from his habit of habitual drunkenness, could so have thickened, and therefore rendered less sensitive, the lining membrane of his stomach, and thus have given more time for the means which were employed to rid that organ of its poisonous contents? Still this will not account for the absence of some symptoms which would have been expected, nor for the mildness of all those present; and I can only assign this case, as we are obliged to many others of different characters, to that class which we call anomalous.

From the London Lancet.

On the Benefits that may be derived from placing Medical Substances on the Tongue instead of into the Stomach, by MR. WARDROP.

IN a practical science like that of Medicine, an insulated fact often forms a connecting link with other facts that had appeared equally unimportant. The Medical observer does well to collect such facts, and it is one not of the least advantages of societies, that they stimulate members of the profession to record observations which might not have been deemed of sufficient importance to be brought before the public in any other channel. With such an impression, I venture, on the present occasion, to call the attention of my fellow-members to a subject which seems to be worthy of their consideration, and which has not hitherto, as far as I know, claimed much attention. There are many circumstances which might be mentioned, in order to show the influence which some

medical substances have on the animal economy, when they are placed upon the surface of the tongue, these effects being caused by the absorption of the medicine, and its subsequent admixture with the mass of blood. Such phenomena are quite analogous to the effects produced by mercury or arsenic, whether these pass into the blood by the pulmonary, by the cutaneous, or by the absorbents of the alimentary canal. A gentleman, subject to what are usually called bilious headaches, had, during many years, seldom failed to obtain relief by taking sometimes two, and sometimes only one grain of calomel. He repeatedly found that there was a distinct difference in the length of time which the calomel took to relieve the headache, according as it was taken in the form of a powder put upon the tongue, or of a pill taken into the stomach. Another gentleman, who had for many years suffered from dyspepsia, and who, for some years before I saw him, was in the habit of regulating his bowels by taking a pill composed of a couple of grains of aloes with myrrh, accidentally discovered there was a remarkable difference in the effect of the pill when swallowed or when allowed to dissolve in the mouth. When taken into the stomach, it always created a good deal of pain in the whole course of the alimentary canal, and the evacuations were irregular both in number and in quantity; but when the pill was dissolved in the mouth, no other sensible effect was ever produced than one natural evacuation. Further experience convinced me of the difference in the efficacy of medicines placed upon the tongue, or taken into the stomach, and led me to inquire into the cause, and endeavor to explain so important a phenomenon. The structure of the tongue pointed out that it possesses an abundant supply of absorbents. "The spirituous parts," observes the illustrious Haller, "more especially of vegetables, are received either into the papillæ themselves, or into the absorbing villa of the tongue, as appears from the speedy renovation of strength by liquors of this kind, even when they are not taken into the stomach." This structure satisfactorily explains how medicinal bodies, when placed upon the tongue, are absorbed and carried directly, by the absorbent vessels of that organ, into the venous circulation; whereas, when the same substances are taken into the stomach, they are necessarily mixed with the food and juices contained in the alimentary canal, so that a more lengthened period must be required to separate them, and convey them by the absorbents into the thoracic duct, and thence into the venous system. Or they may pass unchanged, as has often been observed, out of the stomach, and in this unaltered state they are evacuated along with the excretions from the alimentary canal. This remarkable effect of medicines when placed upon the tongue, is strikingly illustrated in the administration of calomel, and it will be found that placing a very small quantity of it, say the sixth or even the twelfth part of a grain, at short intervals, upon the tongue,

such as every half hour, the mineral is rapidly absorbed, and ptyalism more quickly produced than by any other mode of employing the calomel. These results of medicines, I may also observe, are well known by the effects which croton-oil produces when applied to the tongue; and it is by no means improbable that the good effects of some medicines, when used in the form of lozenges, may be attributed to their absorption by the vessels of the tongue. All the circumstances regarding the difference and the effects of medicinal bodies, when conveyed to the venous system directly by the vessels of the tongue, or when they reach the blood by the more uncertain and circuitous course by the absorbents of the alimentary canal, appear to be worthy of being noticed, and may, it is not too much to hope, lead to some practical improvement in the mode of administering remedies. How far such differences will be found to result from exhibiting chloroform, the hydrocyanic acid, and the sulphates of quinine, iron, copper and zinc, in the form of lozenges, and the advantages of using these medicines in such a manner, well merits further inquiry.

From the Western Medico-Chirurgical Journal.

Psoriasis Palmaris Cured by Iodide of Arsenic, by J. M. SANFORD, M. D.

MR. J. REED, of this city, merchant, aged 38 years, of sanguine temperament and vigorous constitution, applied to me, some time during the last July, on account of a disagreeable and troublesome affection of the hands and feet, with which he had suffered for the previous five years. Upon examination we found the palmar surface of both hands, wrists, and the heels of both feet covered with thick dense epidermal scales, very dry and hard, with deep fissures or cracks extending in the direction of the natural furrows of the palm and fingers. The hands and feet were extremely stiff and painful, and any attempt to use them suddenly, was attended with an increase of pain, and bleeding from the cracked portion of the diseased surfaces. There was also a very troublesome pricking or tingling sensation in the parts, and a burning or itching that much annoyed the patient. The eruption in question made its appearance by one or more inflamed and painful spots, of a dull red color, which extended in various directions, frequently coalescing. After a short time these patches became covered with scales, which increased in number and thickness until the epidermis seemed thick and hard as leather, and cracked as above-mentioned. Occasionally when these inflamed spots occurred in exposed situations they would suppurate and thus augment the suffering and discomfort of the patient. The discharge from these little abscesses was thin and sanious, and after its escape the spots seemed disposed to heal without those further changes, described as occurring when suppuration did not take place.

Inquiries were made relative to the influence of season upon the development of the disease, but it did not appear that it underwent any great change at any particular time. The eruption had been constantly present, to some extent, for five years, and although partially disappearing occasionally, these periods of partial exemption had no connection, as far as the patient was aware, with the season or with his habits of life.

He had applied to numerous physicians, from whom he had doubtless taken the usual remedies, and had also used various popular medicines, but without relief.

The *cause* of the disease, in this case, was obscure. There was no constitutional indisposition, nor anything in the patient's occupation or habits, that could act as a local irritant in its production. His general health was remarkably good; he had not suffered a functional disturbance for months, and presented, when I saw him, otherwise than in the respect mentioned, a perfect physiological condition.

I commenced the treatment by ordering him to drink freely of cream tartar, until the bowels were moved, and to apply at night a bread and milk poultice to the diseased parts. The poultices—which he had frequently applied, always relieved the heat and pricking of the parts, and softened the thickened epidermis, so that he could scrape away considerable portions after its removal. During the day he kept a cloth to the feet, wet in a strong solution of the Bicarb. of Soda, and frequently washed the hands in the same.

I was led to the employment of Iodide of Arsenic, by accident. I had intended, after a brief preparatory treatment, to place the patient on a more energetic course, and had thought of the *Liquor Hydriodatis Arsenici et Hydrargyri*, as the medicine to be used, as recommended by Dr. Graves, of Dublin. Finding myself unable to procure this at our drug stores, and having much confidence in the combination of Iodine and Arsenic in the treatment of various cutaneous diseases, I resorted to the Iodide of Arsenic.

Eight grains of this medicine were dissolved in four ounces of distilled water. Of this solution, twenty drops were given three times a day, in a few drachms of sweetened water. At the same time, fifteen grains of the same medicine was thoroughly incorporated with one ounce of simple cerate, a small portion of which was well applied to the diseased surfaces every morning after the removal of the poultice. The parts were thus in a soft state, admitting, without pain, the removal of the thickened cuticle, after which they were in good condition to receive the ointment.

This treatment was followed by the most decided and happy results. In two weeks the patient was very much improved, and in six weeks from the time it was commenced, no vestige of the disease remained. Two months have elapsed since the cure ap-

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peared complete and there is no return of the disease. This being the first thorough disappearance of the eruption in five years, together with its exemption from the modifying influences of season, encourage me to believe that the cure is permanent.

The prompt and decided effects of the Iodide of Arsenic in a case calculated to test its curative powers, justifies the inference that it is a remedy of peculiar efficacy in the treatment of the various forms of Psoriasis. No disagreeable local or constitutional effects followed its use.

I am at this time employing the same remedy in a protracted case of Ptyriasis, with the prospect of a similar happy result.

From the Boston Medical and Surgical Journal.

Ferro-Phosphas Calcis in Pulmonary Consumption, etc., by H. A. RAMSAY, M. D., Thompson, Columbia Co., Geo.

DEAR SIR,—As every man in the profession is honorably and morally bound to contribute his mite in alleviating the ills of the human race, permit me to call your attention to the above preparation in the treatment of tubercular disease. It is true my experience has not been great with the article, as it is confined to but few cases; yet, the happy results I derived in these cases induce me to direct attention to the remedy, that others may enter the field and try its effect. I do not pretend to say it will relieve every case, or even a majority; but that it will benefit many cases, particularly in this climate, I can say with some confidence. I merely desire that others may try it, and confirm or repudiate my restricted experience. I will remark, that I believe climate and its collateral influences, have a controlling effect in the therapeutic management of most affections; consequently, I am impressed that the medicine I suggest may answer better in southern tubercular disease, than in that of New England.

My experience is not extensive enough with the remedy, to say in what peculiar form of the disease it will do best. In its incipency and decline I have used it with marked advantage. I make it thus: *R.* Phosphas calcis, two parts; phosphas ferri, one part. Dose, ten grains thrice daily, in simple syrup; after five or eight days the dose may be increased to fifteen grains, or more as circumstances may justify. The remedy can be made into a syrup very readily, we imagine, though we have not used it that way. To be effectually serviceable it should be used for some time, and the bowels, if much costive, should be kept open with a warm laxative mixture; if otherwise, they should be restrained with some astringent mixture. The remedy, in my estimation, has all the advantages of the *cod-liver* oil, with none of its disadvantages; and I believe—subject, of course, to farther corroboration—it is destined to supercede all other medicines in the general treatment of tuber-

cular consumption, particularly where abscesses have formed, or in its earliest stages. I send you these views, without going into a disquisition on the theory of the treatment, which would be of no utility to any body. As previously stated, I wish to create no undue hopes, but I respectfully invite the profession at large to try the remedy, and if it proves successful in one instance, or is the means of saving a single life from impending death, I shall be amply compensated for giving this article to your readers.

From the Cincinnati Gazette.

Death of Dr. Drake.

IN Dr. Daniel Drake, Cincinnati has lost one of its oldest pioneers—an eminent citizen—a most distinguished physician—a man of science, and a consistent Christian. Such a loss has no reparation, but in the hope that, guided and enlightened by such an example, another generation may raise up others like him. For ourselves, we can only lament the star that is set, on this hemisphere, to rise no more.

In the brevity of these few lines there is only room to record some of the epochs in his life, some dates in his great public services, and note something of his peculiar character.

Dr. Drake was born in 1784, in New Jersey, whence his father moved to Kentucky. It was in Mason county, Ky., in the pioneer society, and in rural scenes, to which, in after life, he often referred, that he received his early impressions of men and Nature. Of both he was ever after an ardent student. With man, both social and physical—with Nature, both scientific and picturesque—all his pursuits and tastes led him to a familiar knowledge. With a peculiar aptitude for such tastes and pursuits, formed amid the scenery of woods and fields, and in the simplicity of primitive society, it was but natural that he should turn his attention to the study of medicine—that science which, more than any other, led to a familiar acquaintance with the objects and subjects upon which his mind dwelt. Accordingly, he commenced the study of medicine with Dr. Goforth, of Cincinnati, in his 16th year, 1800. He was, therefore, at his death, a physician *half a century in practice*, and though occasionally absent, both as teacher and traveller, never in that time, lost his citizenship in Cincinnati.

In constitution active, energetic and sanguine, he early became imbued with that best form of ambition, the ambition of being a public benefactor in the walks of Science, Letters, Utility, and Benevolence. It is vain here to attempt even an outline of his brilliant services in that career. Many of them have left an enduring impress on society, and become monuments to the reality of his benefactions, even when unremembered by those who profit by the results.

While a very young man, he became one of the active founders of several scientific and benevolent Societies, whose objects were the cultivation of Science and the public good. Before these, he often delivered lectures, or essays, on topics of Natural History, Medicine, or Social Action. One of these was published in the form of "Sketches of Cincinnati," which soon after became the foundation of a more elaborate work, entitled "Picture of Cincinnati," including a Natural and Statistical View of the Miami Country, published in 1815. This made him known both in Europe and America, and was one of the first things which drew the attention of the public to this town and section of the country.

So full of research and so accurate was this natural history of the Miami country, and of the locality of Cincinnati, that nothing substantial has been added to the account since. The "discourse" delivered before the Medical Society last winter, was his own proper sequel to that work, filled with reminiscences of our early progress and society.

The Medical College of Ohio is the next monument to his labors. The charter of that institution was passed January, 1819, and was passed by the Legislature on his own personal application. During many years subsequent he was one of its professors. During his whole after life, it occupied his thoughts and his cares; and in its cause, by overtaking an ever-active brain, he at last died.

Separated for a time from that, by changes incident to medical politics, he became a professor in the Lexington School, in the period of its greatest prosperity; and in recent years, in the Louisville School, which rapidly rose to unprecedented success.

In the meantime, 1836-7, he was the founder of a new Medical School in Cincinnati, attached to Cincinnati College. This school flourished in the brief period of its existence, but was given up for the want of an endowment. It was about the same period that Dr. Drake, in the same public spirit which ever animated him, became one of the earliest promoters of our railway system.

He was one of the first, if not the first, to propose the great Southern Line to Charleston, S. C. He was one of the active delegates to the Knoxville Convention, where were commenced the first efforts for the Railway Lines (soon to be completed) between the Ohio Valley and the Southern Atlantic. For the last six or seven years his hours of unprofessional service have been devoted ardently and intently to his last great work on the Diseases and Climatology of the Mississippi Valley. One volume of this, occupying near a thousand pages, has already been published, and it is no exaggeration of its merits to say, that it stands, so far, the greatest work of American science. It is appreciated abroad and will be at home. It was in the attempt to finish this work—the only remaining ambition of his life—now left, like a creation of human hopes, a broken structure—that he fell in the harness, and died on the Battle-field of Life.

From his domestic life we lift only enough of the veil to disclose the strength of affection and friendship, which all who knew loved and valued above all public fame. It wearied in no labor of love—failed in no hour of adversity, nor paled before any other light.

In 1806, he married Harriet Sisson, a niece of Gen. Mansfield, then a resident of Ohio. With her he lived near twenty years, with a conjugal devotion, which seemed equal to that pictured in romance, and from her death lived a widower, ever sorrowing over her memory.

Three of his children, now with families, were his constant care and his ever-present thought; with his two daughters he lived at his death, and as he bade the world farewell, bade them not sorrow over him; for long since he had surrendered himself to his and their Redeemer.

Here we finish this brief tribute to friendship and worth—less than half we would—more than he needs; for henceforth,

“Entertain him all the saints above,
In solemn troops and sweet societies,
That sing, and singing, in their glory move.”

Translated for the Stethoscope.

Physiology of the Liver.—LESSONS OF M. BERNARD in the College of France.

THE organs intermediate between the intestines and the heart are, on the one hand, the *venæ portarum*, the liver, and the spleen; and on the other hand, the chyliferous vessels, the mesenteric glands, the thoracic duct, and the veins into which it empties. All of these organs evidently modify substances which are absorbed. Galen spoke of these modifications, and insisted on the importance of the liver in regard to them. According to him, it is the function of this organ to decoct the alimentary substances; he compared its action to that which takes place in the formation of wine: one portion was supernatant—this was the bile: another portion descended into the spleen, this was the dregs or splenic sediment; the blood itself was the wine. Galen, ignorant of the circulation, blindly established this theory; yet one may perceive that it has a foundation in truth. It prevailed for fourteen centuries. It was first attacked by Vesalius, and afterwards by Van Helmont, and yet more zealously by Azelli, who first discovered the lymphatic vessels, yet without finding their outlet. Pecquet, lastly, having discovered the reservoir which bears his name,* and the entrance of the chyle into the blood, gave the last blow to the theory of the celebrated Roman physician.

The discovery of the circulation, towards the middle of the

* The dilatation by which the thoracic duct commences [*receptaculum chyl*] opposite the second lumbar vertebra, is usually called “*resevoir ou citerne de Pecquet*,” by French anatomists. See Cruveilhier, tome 3, p. 141.—Trans.

seventeenth century, completed the entire desertion of the liver in favor of the lungs. Thomas Bartholin, who had participated in the researches of Azelli, sustained with violence the new ideas : he annihilated the functions of the liver ; and, as it was of no farther use in the economy, he wrote its *epitaph*. One can hardly form a conception of the passion and stubborn animosity with which these discussions were carried on. We must descend even to the time of Magendie to see the functions of the abdominal venous system restored. It is universally known that this great physiologist has shown, by incontestable experiments, the part which this system plays in the process of absorption.

M. Bernard announces that he inclines to the doctrine of Galen, inasmuch as he will prove the immense importance of the liver. He will advance only upon the basis of rigid experiment, and thereby he hopes to induce his hearers to his mode of thinking. He will not encounter such spirits as those of the professors of Montpellier, before whom Pecquet repeated his experiments. Those professors did not believe it possible to apply to man principles derived from experiments on animals : they indignantly asked, What would become of the science laboriously accumulated, if they suffered it to be thus overturned ? Following the example of Riviere, who replied to them that the senses alone should control our belief, it is to the senses that M. Bernard will continually appeal.

It will be necessary to renounce several received ideas derived from collateral sciences when we enter upon questions relative to the process of absorption. Although these sciences have often contributed to the progress of physiology, yet it is certainly an error to suppose that here things take precisely the same course as in a laboratory. If the gastric juice acts in a glass just as it does in the stomach, yet there are other phenomena which depend upon nervous influence, and which cannot be demonstrated by chemistry.

Moreover, dissections and injections cannot show upon the dead subject how certain substances pass from one sanguineous system to another, whereas experiments upon animals exhibit beyond a doubt the changes of course which occur during life. The disagreements of physiologists have frequently no other cause than this, that they experiment under different circumstances.

There are on the surface of the intestines two orders of vessels which absorb, the veins of the portal system and the lymphatics. The first take up all albuminous, nitrogenized, and saccharine soluble matter. The second are loaded chiefly with fatty substances.

M. Blondlot admits that the villousities of the intestinal veins have a peculiar arrangement, by means of which they inhale some substances, such, for example, as the prussiate of potash ; while the lymphatic vessels cannot take up this body. This is an error ; for M. Bernard has established the fact that the prussiate of potash is found in the chyloferous vessels, only the mesenteric glands, in elaborat-

ing the chyle, deprive it of soluble matter, and retain only fatty matters. Sugar also, like the prussiate of potash, is never found in the thoracic duct; but, since its presence has been proved in the primary chyliferous vessels, this is because it is removed by the mesenteric glands.

On the other hand, it is indubitable that many soluble substances are not absorbed. We showed last year, in detailing the curious experiments of M. Bernard, that the poison called *curare veneno*, and the venom of the viper, do not enter the blood, unless there is a lesion of the mucous membrane with which they are in contact; and also that this phenomenon occurs in some other substances: such as pepsin, diastase, and emulsin. The same fact obtains in regard to putrid and virulent matter. If we introduce a putrid substance into the blood, typhoid symptoms intervene; but these do not occur if such a substance only enters the digestive passages—at least, unless these contain sulphuretted hydrogen. As to virulent substances, if they are not absorbed, it is because they happen to be deposited upon a thin layer of mucus, which serves the purpose of epithelium. It is thus that we can explain the experiment of Mr. Cullerier, as well as the singular observation of M. Ricord, both of which are detailed in *L'Union Medicale* of April 23.

When animals are fasting, the vessels of the portal system have an easy task; for then they receive only the blood of the mesenteric arteries. But when digestion commences, alimentary matters, with a flood of secretions besides, by means of absorption, enter the portal veins, which continue moreover to receive in the same quantity the blood of the mesenteric arteries. The liver is then gorged by an enormous mass of liquids; the blood, accumulating in it as in a sponge, greatly augments its volume and deepens its color. When digestion is concluded, the blood resumes its course, and the liver returns to its natural size, form, and color. These phenomena, in fact, are common to all organs which are intermittent in their functions. With the view of determining the amount of blood contained in the liver during the period of digestion, M. Bernard has made the following experiment: He took three rabbits of the same litter, the first was fasting and weighed 650 *grammes*,* its liver weighed 36 *grammes*; the second, which commenced to digest,

* MEASURES OF WEIGHT.

French Measures.	Approximate Value
1 centigramme,	1-5th of a grain.
1 decigramme,	2 grains.
1 gramme,	20 grains.
10 grammes,	2½ drachms.
100 grammes,	3 ounces 2 drachms.
1 kilogramme,	2 pounds.

and which weighed 690 grammes, presented a liver which weighed 38 grammes; while the third, weighing 700 grammes and in full digestion, had a liver of 60 grammes. Taking into consideration, then, the relative difference in weight, there was still a very notable augmentation of the bulk of the liver during the period of digestion.

We will not follow the professor in the views which he develops in regard to the general arrangement of the circulatory system of the liver, in regard to the ultimate structure of that gland, and in regard to its secretions. It is now perfectly well known, that all animals which possess a liver, are provided with portal veins emptying into that organ, and that the four instances in which the portal vein emptied into the vena cava without traversing the liver, are either contested or are so explained as to prevent them from rendering doubtful the important functions of the liver. We are also acquainted with the different propositions which have been advanced by authors in regard to the origin of the biliary passages: some insisting that they commence by a cul-de-sac—others by the plexuses which surround the hepatic artery and vena porta. As to the products of secretion: one, known from the earliest times under the name of bile, escapes by the intestines; another, the discovery of which is but recent, the sugar, mingling with the blood of the liver, issues from that organ by the hepatic veins and goes to the lungs, where it is destroyed. The blood which arrives at the liver is then decomposed into sugar and bile. May not the bile be in some way the molasses of the sugar? We shall find that there are, moreover, two other products of secretion in the liver.

Faithful to the promise which he made in the beginning, that he would proceed only upon the basis of rigid experiment, M. Bernard concludes these preliminaries by showing his class the method for obtaining chyle and genuine blood of the portal vein. Peculiar precautions are necessary in order to analyze comparatively the blood which enters and that which issues from the liver; for there are phenomena in the circulation, unnoticed by authors, which have been the sources of the gravest errors. We have already noticed, in a preceding report (*compte-rendu*) that the current of the blood from the intestines to the liver, ceases as soon as the abdomen is opened, and the compression exercised by the diaphragm and abdominal muscles is removed; the blood from the liver thereupon descends towards the intestines, so that in collecting the contents of the vena porta, we have blood modified by the liver, or at least this blood mingled with that which has not yet entered that organ. This explains the fact that such analyses have not heretofore offered sensible differences.

M. Bernard had a large dog, in full digestion, placed upon his

table: he made an incision and placed a ligature upon the trunk of the vena porta; afterwards he killed the animal by puncturing the medulla; he then opened the abdomen; the heart still palpitated. He divided the vena porta below the ligature, and collected nearly an ounce of blood. He next isolated the thoracic duct, which, as well as the other chyloferous vessels, is distinguished by its milk-white color; he cut this before its discharge into the venous system, and procured about two-thirds of an ounce of liquid blood, which was observed to flow more abundantly as the abdominal vessels were compressed. These liquids, thus collected, were reserved for future experiments. In order to fulfill the programme announced at the commencement of the course, we shall divide this report into five paragraphs:

1. Saccharine matters formed in the liver.
2. Fatty matters formed in the liver.
3. Fibrine formed in the liver.
4. The biliary secretions.
5. The circulation of blood in the liver.

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From the Jour. des Connais, Med. Chir.

Is the Physician authorised to provoke Premature Artificial Abortion to save the Mother?

A LONG discussion, in which some of the most distinguished medical savans have taken part, has been for some time going on before the *Academie de Medicine*, on the subject of artificial abortion. This controversy, for it has already reached that point, grew out of a report entitled, "*De l'accouchement premature artificiel*," presented to the Academy of Medicine on the 10th of February, 1852, by M. Cazeaux.

The following, as we think, just conclusion, closes the report of M. C. on the subject:

1st. It is in consequence of a false interpretation, that the laws, both human and divine, relative to abortion, have been applied to abortion practised with a conservative object.

2nd. Let the law punish crime; but they cannot reach, without injustice, an act accomplished with the purest intentions.

3d. Placed in the desperate alternative of choosing between the life of her infant and her own, the female has, by the laws of nature, the right to decide against her offspring.

4th. In this case the physician may, and should sacrifice the infant, for the safety of the mother.

5th. Provoked abortion being much less serious for the mother than embryotomy, performed at the full period of gestation, the accoucheur may, and ought to give it the preference.

6th. Deformities, in which the pelvis may be found less than six centimetres and a half in its shortest diameter—hemorrhages which nothing can check---tumors either in the hard or the soft parts, which cannot be removed---are the only indications which can call for provoked abortion.

7th. The physician should never decide upon a step of this serious nature without the previous advice of several enlightened medical men.

From the British and Foreign Med. Chir. Rev. and Dublin Med. Press.

On the Catarrhal Pneumonia and Lobar Pneumonia of Children, by MM. TROUSSEAU and LASEGUE.

CATARRHAL (or lobular) pneumonia is a disease as distinct from simple (lobar) as variola is from erythema. This is seen in their respective mortality. Of twenty children who have been admitted into the hospital clinique suffering from simple pneumonia, in six months all have recovered; of nearly thirty who were attacked with catarrhal pneumonia, not one survived. Most of the first class of cases exhibited an excessive degree of acuteness, which burnt out like a fire of straw; while several of the second, notwithstanding their fatal termination, commenced with very mild symptoms.

Simple pneumonia hardly ever affects a child below two years of age, and rarely those of two or three, but becomes of more and more frequent occurrence as the child approaches adolescence. Its cause and symptoms resemble those of the adult, with some modifications. After twenty-four or thirty-six hours, the souffle and bronchophony can alone be heard; the crepitant rale, which is often observed in the adult when the patient coughs, even when souffle is present, is hardly ever heard in the child. So afterwards, from day to day, without the crepitation of resolution, the souffle disappears, leaving only a feeble respiration. The progress of the disease is also more rapid than in the adult. In the mild form of the disease, recovery takes place rapidly, and in large proportion; but in its grave form, many cases are lost by any mode of treatment. M. Trousseau generally bleeds the child, gives it an emetic of sulphate of copper, and then a mixture containing Kerme's mineral and extract of digitalis.

Catarrhal pneumonia commences with a catarrh, which rapidly extends to the small bronchi, and then we hear numerous and small subcrepitant rales disseminated over both lungs, and especially posteriorly. These rales may persist for four, six, eight, or fifteen days, without any souffle becoming manifest; but sooner or later we hear a souffle, the resonance of the cries of the voice, or at least a prolonged respiratory murmur. While these latter sounds, common to simple and catarrhal pneumonia, are thus manifesting them-

selves, we find by the subcrepitant rales that the capillary catarrh is still persisting in the rest of the lung. The disease has extended from the mucous membrane to the parenchyma of the organ. Febrile action is less than in ordinary pneumonia, being predominant at some portions of the day and entirely ceasing at others; and these alternations of better and worse may continue for fifteen, twenty, or thirty days; the disease being originally a pulmonary catarrh, and partaking of the obstinacy and uncertainty of catarrhal complaints. As more and more of the parenchyma becomes implicated, the fever becomes more continuous and intense, and the respiration more difficult, until the children die exhausted. In other cases, in which the bronchial phlegmasia was very intense, from the first, and the lung became rapidly invaded over a great extent, death takes place with rapidity. The progress of the disease has usually been more rapidly fatal when it has succeeded to measles, chronic disease of the skin, or laryngitis. All means of treatment that have been tried have proved impotent.

These two affections may be compared, *exceptis excipiendis*, with erysipelas and phlegmon. Erysipelas traverses the surface, like the catarrh; and when it persists too long, it induces ulcerations of the skin, furuncles, and circumscribed subcutaneous abscess, just as the capillary catarrh induces suppuration of the lobules, little abscesses of the lungs, and circumscribed pneumonias. Simple pneumonia, on the other hand, progresses like simple phlegmon, violent in its febrile reaction, but terminating abruptly and rapidly.

It must not be supposed, from what has been said, that catarrhal pneumonia is almost invariably fatal. Although this is the case amidst the miasmata of an hospital, which exert effects at once so terrible and so difficult to avert, it is not so in private practice. In this, one-half the patients may be cured by repeated vomiting, flying blisters, antimonials, and digitalis; but how terrible are the ravages of a disease which, under the most favorable circumstances, kills one-half its subjects!

From the Medical Examiner.

Review of M. Bernard's Theory of an Hepatico-Renal Circulation. by D. B. PHILLIPS, M. D., Assistant Surgeon, U. S. N., and Member of the Academy of Natural Sciences of Philadelphia.

IN reviewing the recent theories upon physiology, I have met with nothing so well calculated to arrest the attention, as the assertion of M. Bernard regarding the functions of the inferior vena cava, renal, portal, and azygos veins, during the process of digestion.

His views may be briefly stated as follows: Whilst the digestive process is going on, the portal veins imbibe the fluid contents (or a sufficient portion of them) from the stomach, and thus become

engorged; the liver not being able to receive the whole of this, and still carry on its healthy office, a portion of this blood is sent into the inferior cava by a direct communication between it and the portal vein; this blood, charged with the materials absorbed from the stomach, passes up the vena cava until within a short distance of the diaphragm. here the coats of the inferior cava contract upon its contents, forcing the blood down again as far as the renal veins, but owing to the existence of valves just below the mouths of these veins, it cannot pass lower down, but is forced to enter those veins and thus pass on to the kidneys, where any poisonous properties are eliminated, without having entered into the general circulation. The blood from the lower extremities, he thinks, is returned to the heart by means of the two azygos veins, which, he affirms, have their origin below the valves before alluded to. It is with very great diffidence that I attempt an investigation, or presume to question such high authority as M. Bernard's, yet it seems to me that there are some insuperable objections to his theory when applied to the human subject. In the first place, after having witnessed careful dissections made for this purpose, I have never been able to discover any trace of the communication between the inferior cava and the portal vein, other than through the hepatic veins. Secondly, anatomists tell us that there are no valves in the inferior cava: this is positively affirmed by Mr. Wilson. Thirdly, the same author tells us, that the azygos veins frequently anastomose with the renal veins; in which case it would be evident that the existence of valves in the inferior cava would be no hindrance to the passage of the blood of the portal veins into the general circulation. These reasons alone seem to me sufficient to refute M. Bernard's theory; but apart from these, there still exist others of even more stubborn nature. Suppose we admit the existence of communication, valves, and proper arrangement of the azygos veins, as stated by M. Bernard. Then, during the whole digestive process, there must of necessity be an antagonism between the renal arteries and veins; the first driving arterial blood into the kidneys, with all the force of a powerful muscle, such as is the heart, and the other acting only by the comparatively feeble contractility of the coats of the cava, it would be self-evident that the latter would be prevented from entering the kidneys from the little resistance it could afford. But even were the antagonism perfect, and did both vessels discharge their contents into the kidneys with equal force, then for the space of fifteen hours out of the twenty-four, the kidneys would become the recipients of an amount of blood, even quintuple the quantity of urine evacuated.

If M. Bernard's theory is correct, there could of course be no blood returned from the kidneys during the whole process of digestion.—Now, adopting five hours as the length of time occupied in this process, and allowing three meals per day; we should have no

circulation in the kidneys, (or rather no return of blood from them) for fifteen hours out of the twenty-four. What then becomes of the enormous amount of blood which has been driven into these organs by both arteries and veins during the whole of this period? M. B. has given us no solution to this mystery. Thus, then, to sum up: The communication between the vena cava and portal system cannot be demonstrated; except, perhaps, as an abnormal occurrence in the human subject. The existence of valves in the inferior cava are denied by the best anatomical authority; the existence of anastomoses between the azygos and renal veins, proven to be of frequent occurrence; and, above all, there still exists the objection, that the kidneys receive an amount of blood vastly exceeding the quantity of urine eliminated. I think that with these difficulties unexplained, that we must even hesitate to adopt a theory which, although beautiful in its design and imagination, seems thus far at least to be wanting in facts and reasons to support it.

From the London Monthly Jour. of Med. Science.

On the Function of the Spleen and other Lymphatic Glands, as Secretors of the Blood, by J. H. BENNETT, M. D.

1. *Relations between the Colorless and Colored Corpuscles.*

Dr. Bennet, believes, with Mr. Wharton Jones, that the colored corpuscle is merely the liberated nucleus of the colorless cell. The transformation takes place in the following manner:—The colorless cell may frequently be seen, by the aid of acetic acid, to have a single round nucleus; but more commonly the nucleus is divided, each half having a distinct depression, with a shadowed spot on the centre. Occasionally, before division takes place, the nucleus becomes oval, elongated, and sometimes bent, or of a horse-shoe form. It may be divided into three or four granules. These stages are figured by Dr. Bennet; they were discovered by him in his interesting observations on leucocythemia, and in experiments on mammals, birds, reptiles and fishes.

He does not believe, with Mr. Wharton Jones, that all the nuclei forming the colored corpuscles, in mammals, should necessarily be provided with a cell-wall. Many, however, do proceed beyond this point, and may be seen to have cell-walls; the nuclei, in such cases, increase endogenously, by fissiparous division, and, on the solution of the cell-wall, become colored blood-discs. In fishes, reptiles and birds, the colored blood-corpuscles are nucleated cells, originating in the blood-glands.

2. *Origin of the Blood-Corpuscles.* This (as was enunciated many years ago by Hewson) is to be looked for in the lymphatic glandular system, under which head are included the spleen, thymus, thyroid, supra-renal, pituitary, pineal and lymphatic glands. Nuclei and nucleated cells are found in these bodies, and Dr. Ben-

nett's observations on leucocythemia have shown that an increase of colorless cells in the blood is connected with enlargement of the spleen and other glandular organs. The blood of the splenic and portal veins is always richer in colorless corpuscles than that of the systematic circulation; and in young animals, in which the thyroid, thymus and supra-renal glands are most fully developed, the blood contains most colorless corpuscles. Moreover, in a case of enlargement of the thyroid body, this organ contained cells and nuclei of much smaller size than usual, and corresponding cells and nuclei were found in the blood. In another case, the colorless corpuscles in the blood were of two distinct sizes, corresponding with a similar appearance in the corpuscles of the lymphatic glands. It is difficult to determine how the corpuscles find their way from the lymphatic glands into the blood; but Dr. Bennett suspects that there must be a direct venous communication. He believes that, if he has established that the corpuscular elements in the so-called blood-glands are transformed into those of the blood, it will follow that the lymphatic glands secrete the blood-corpuscles the same as the testes secrete the spermatozoa, the mammae the globules of the milk, or the salivary and gastric glands the cells of the saliva and gastric juice.

The most probable and consistent mode of origin of the corpuscles is in an organic fluid, by the production of molecules, the successive development and aggregation of which constitute the higher formations. Multitudes of free nuclei join the blood, and are at once converted into colored blood-discs; and their cells circulate for a time, when their walls are dissolved and their nuclei become colored. The number of colored corpuscles in the blood increases in proportion to the development of the lymphatic glandular system in the animal kingdom, and Mr. Drummond and Dr. Bennett have observed that the nuclei in the spleen, varying in size in different animals, correspond with the nuclei of the blood-corpuscles.

3. *Ultimate Destination of the Blood-Corpuscles.* Dr. Bennett believes that the blood-corpuscles are dissolved, and, with the effete matter absorbed from the tissues of the lymphatics, constitute blood-fibrin. Zimmerman believed that fibrin resulted from the metamorphosis of the textures. The arguments which support this view appear to Dr. Bennett to be unanswerable. There is no fibrin in the chyme, very little in the chyle, less in carnivora than in herbivora. There is no fibrin in the egg, nor in the blood of the fetus, and very little in the new-born infant. On the other hand, all those circumstances which cause exhaustion of the textures, or increase the amount of absorption, augment the quality of fibrin; as after inflammatory or other exudations, starvation, violent fatigue, pregnancy, and frequent bleeding and hæmorrhage. The amount of fibrin in the blood seems out of proportion to what would be required for textural nutrition. Increase of fibrin is also accom-

panied with diminution of the red corpuscles: hence it appears probable that fibrin results from a solution of the blood-corpuscles, conjoined with the effete matter derived from the secondary digestion of the tissues, which is not converted into albumen.

From Dublin Quarterly Journal.

On Traumatic Spasms, by W. COLLES, Esq.

MR. COLLES describes four kinds of spasms occurring after injuries:

1. Immediately after the receipt of any injury, before any adjustment is attempted, the muscles of the limb are thrown into spasmodic action by the least motion, or by the handling of the parts. The treatment is merely to place the limb so that the muscles may be relaxed, to reduce the fracture, and apply firm but not too tight dressings. A full opiate will be useful, and sometimes should be preceded by the removal of a few ounces of blood. This is never a formidable affection, and seldom lasts beyond the second or third day.

2. This is the most severe and rapidly fatal form. About the third or fourth day after the injury, the patient, whenever he is dozing to sleep, is suddenly awakened by a severe jerk in the limb, and a very acute but transient attack of pain. These spasms, at first at irregular and distant intervals, become more frequent and regular; then the disease attacks the muscles of that side of the body, and extends gradually to the other side, till at length every voluntary muscle is in violent action, during this momentary spasm. The pulse becomes considerably increased in quickness, but not in force; the temperature is not increased at first; as the disease advances, a perspiration breaks out, and becomes more profuse, cold, and clammy towards the end, when the patient's mind begins to wander. Death generally occurs, apparently from exhaustion, between the second and sixth day from the invasion of the disease. Early amputation is believed by Dr. Colles to be the only remedy which can be depended on. After death, it is generally found that a portion of nerve is impacted between the ends of the bone, so that it is pressed on and inflamed.

3. The third form is that denominated tetanus, and which comes on towards the cure of the injury. On this form amputation has no influence, and it was probably from success in some cases of the second form which induced Baron Larrey to recommend amputation in tetanus. The diagnosis of the second and third form is important, and their more essential differences are thus given:

1. The second form of spasm comes on in three or four days after the accident.	Tetanus seldom appears before the second or third week.
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2. It commences by spasm in the limb injured.

3. In the intervals between the spasms the muscles are much relaxed, and the patient can swallow and move with comparative ease.

4. The pain is chiefly in the wound, and is most excruciating during spasm.

5. The disease runs its course in three or four days.

6. Amputation holds out the only prospect of relief.

7. The disease seems to have a local origin.

Tetanus commences by stiffness of the (jaws and) throat.

In tetanus there is constant rigidity, almost preventing swallowing, or moving of any description, and giving a peculiar expression of countenance.

In tetanus there is no pain in the wound, but a pain at the scrobiculus cordis.

Tetanus may continue for as many weeks.

In tetanus, amputation is useless, if not injurious.

Tetanus is more of a constitutional affection.

4. Mr. Colles next makes a few remarks on the affection, which results from implication of a nerve in a tight cicatrix. Division of the nerve, or amputation, can alone effect the complete removal of the disease.

From the Provincial Medical and Surgical Jour.

On the Molecular Origin of the Tissues.

DR. BENNETT read a memoir to the Physiological Society of Edinburgh, the object of which was to prove not only that cells were developed from nuclei, as had been previously ascertained, but likewise that these nuclei themselves originated in smaller bodies, viz., molecules: and that these were the origin of the tissues. He also endeavored to indicate the laws which governed their formation, arrangement, and subsequent development. The author showed, by a reference to the observations of Schleiden and Schwann, that the first step in the organization of all tissues was the coalescence of molecules and granules into a cell-germ, which farther derived a cell-wall from the agglomeration of other molecules. At any period in the progress of evolution the onward progress might be checked, when the structure became disintegrated in a manner inverse to its mode of formation. First, the cell-wall became dissolved, then the nucleus, both of which were reduced to molecules, and then to an amorphous fluid. The author likewise mentioned another form of molecules, which he called secondary. These constitute peculiar secretions. The author next alluded to the origin and mode of formation, with the physiological and pathological importance of these three kinds of molecules, and described the investigations of Ascherson and Melsens. He concluded by pointing out the relation of a knowledge of this molecular formation to the study and treatment of disease. He stated, for instance,

that in tubercular diseases the molecules of evolution were deficient, from absence of the fatty element in the chyle; and that, in some other diseases, as those of gouty, rheumatic and scorbutic origin, a cure could only be effected by the introduction of such substances into the blood as favored the production of molecules of transformation. The paper was very elaborate, and commanded a large share of attention.

From the Ohio Medical and Surgical Journal.

Professional Aphorisms.

THE talented editor of *L'Union Medicale*, lately gave a few extremely apposite and amusing professional aphorisms, in one of his clever *feuilletons*. We shall just extract a few:

1. Life is short, the making of a practice difficult, and professional brotherhood deceptive.
2. A man's practice may be compared to a field, on which *tact* acts as a manure.
3. A medical practice may be likened to a flannel waistcoat—neither can be left one moment without risk.
4. The practitioner who is often absent runs the same danger as the lover, for both may find themselves supplanted on their return.
5. Take great care of your first patients, ye beginners, for these are the seed from which your practice is to spring.
6. When a medical man wishes to get rid of a troublesome patient he need but send in his bill.
7. The practitioner who expects his reward from the gratitude of his patients, may be like the countryman who waited, in order to cross the river, until the waters had done flowing.
8. To ask an exorbitant fee always redounds to the disgrace of the profession. A wealthy patient who was asked an enormous sum by a surgeon, after an operation, answered, "You ought to have said at first, your money or your life."
9. When the blind credulity of the public in medical matters is considered, one does not wonder that there are so many quacks and impostors, but on the contrary, that there are still so many upright medical men.
10. Consultations are either very useful or very dangerous, just as the medical attendant knows how to manage. It is foolish to have recourse to them too often, and still more foolish to reject them altogether. Don't wait till the friends of the patient ask for a consultation; but don't talk of a consultation if you think the result will be favorable.
11. It is not an easy task to come out of a consultation without being a little lowered in the estimation of the patient and his friends,—the more so as there are physicians and surgeons who with the utmost urbanity, throw out perfidiously, concealed hints, which the practitioner should immediately take up, and boldly insist upon a clear statement.
12. A consultation is often a note of hand drawn by the usual attendant upon the patient, for the benefit of the physician called in to give his opinion.

From the Western Lancet.

New Method of Treating Still-born Children. By T. WOOD, M. D., of Cincinnati, Ohio.

MRS. C—— was brought to bed in her first confinement, and had a very protracted and tedious labor, from a rigid and unyielding vulva. The child on delivery was in a state of syncope, so profound as to leave but little hopes for restoration to life. Full five minutes had been lost in fruitless efforts to excite breathing, and the only sign of life in the child was a slight convulsive effort while its lower limbs were yet in the vagina, after which it lay flaccid, ex-sanguineous, and in appearance dead. Cold air, cold water, and brandy had been thrown on its chest without producing the slightest effect, and I was about to inflate its lungs, when I noticed that the vessels of the cord were much distended with blood, and a very feeble pulsation in its arteries. Finding this condition of the cord, suggested the idea that, perhaps, if the blood it contained could be forced into the circulation of the child, it might afford the required stimulation. Instantly acting on the suggestion, I took the cord between my thumb and fingers, and drew its whole length between them, so as to force the blood into the child, when it immediately cried lustily, and animation was completely restored. It had no more difficulty in beginning life, and is now doing well.

I report this case under the impression that this mode of treatment is original.

Since having the above case, I tried the same treatment in a child that was delivered by a long labor embarrassed by convulsions.—Animation was at once restored on forcing the blood from the cord into the circulation of the child, but there was not, previous to resorting to this means, such complete prostration of the child as in the first case, and though effectual, the result was not so striking.

My friend, Dr. A. M. Slocum, informs me that since I related my case to him, he has tried it in a similar prostration of the child, with the same happy result.

From the Provincial Medical and Surgical Jour.

On the Nerves of the Bone, by M. KOELLIKER.

M. Koelliker states that, in the human subject, the nerves accompany the blood-vessels not only in the medulla of the long bones, but also in the spongy tissue of the epiphyses. The short bones, such as the vertebræ, are richly supplied with nervous filaments, as are also the blade-bones and ilia. They are also readily demonstrated in the bones of the cranium. The function of these nerves he considers to be chiefly that of nutrition; but that they

contain sensitive fibres is plainly shown by the pain which attends disease of osseous structure.

From the Southern Medical and Surgical Journal.

Snoring Prevented by Excision of the Uvula. By the EDITOR.

CASE. A. D—, about five years of age, had for two or three years suffered from considerable enlargement of the tonsils, which impeded respiration so much during sleep, as to cause him to snore very loudly, and seem to be on the point of suffocation. About a year ago, I excised both tonsils, after which the respiration was very much improved and the snoring nearly ceased. In March last, his respiration was nearly as bad as ever, and his parents, apprehending that he might actually suffocate in his sleep, again requested medical aid. Upon examination I found that the tonsils had again become somewhat enlarged; that the uvula hung flabbily between them and rested upon the base of the tongue, and that this state of things taken in connection with the natural, yet extraordinary smallness of the bucco-pharyngeal aperture, was sufficient to account for the impediment in respiration. It should be remarked, however, that, although the uvula appeared flabby, it was not paralyzed, for it would sometimes retract spontaneously, and always do so when touched with an instrument.

As the tonsils projected but slightly beyond their proper limits, and their further excision was very difficult, if not hazardous, in consequence of the smallness of the mouth and extreme narrowness of the throat, I resolved to try the effect of simply clipping off the uvula. The child has not snored since, and has from that time slept without any impediment in his respiration.

Would it not be advisable to resort to this simple operation for the relief of snoring in adults? It is certainly worthy of trial, and might add very much to the comfort of those who are annoyed with a snoring bed-fellow.

From the Provincial Medical and Surgical Jour.

Vibratile Cells in the Bronchial Mucous Membrane of Man, by M. BIERMER.

ONE of the most curious revelations of the microscope is the existence of epithelial cells, the free surface of which is covered by extremely fine ciliæ, presenting, during life and immediately after death, a vibratile motion. M. Biermer has seen this curious phenomenon in the bronchial membrane of a man dead of phthisis; and by sprinkling the face with charcoal, was enabled to see that the molecules were uniformly moved from below upwards, proving that the epithelial ciliæ moved in that direction.

EDITORIAL.

On Syphilis Constitutional and Hereditary; and on Syphilitic Eruptions. By ERASMUS WILSON, F.R.S., Author of a Treatise on Diseases of the Skin, etc.—Philadelphia: Blanchard & Lea. 1852. Svo. pp. 284.

THIS book, which is very appropriately dedicated to Ricord, being in all essential particulars an echo of his teachings, is an illustration of the benefits which a single individual, by a course of rigid experimentation and logical deduction, may confer upon science. Not only are new facts thus added to it, but a school is established whose influence extends far beyond the limits of a *speciality*, and spreads itself over other fields of knowledge. This is what has happened, and is proving true in the case of Ricord. The influence of his system of investigating syphilitic diseases is being felt in every country, and is especially clearing up the few dark points in the pathology of that disease, which remain notwithstanding his labors. Mr. Wilson's work is of the Ricord school, and worthy of its association, being, with the exception of Acton's work, the only one of English origin which suitably represents it.

It is pleasing to see the tribute paid by the author to his master, which is in these terms:—

"The subject of the treatment of syphilis cannot be approached without an eulogium on the genius of Ricord. The published opinions of Ricord are distinguished for their simplicity, their clearness, and their practical application. It is to him that we owe the practical lesson, that the virus of syphilis lies hid in the developing chancre for three days, and that within that limit of time we may destroy the poison in its concealed retreat; that, if it escape us then, mercury must give place to iodine. In this encounter between the wisdom of medicine, and the assaults of a destructive poison, the art is to use and not abuse our remedies; and that power must depend more upon ourselves than upon our teacher. The wrong remedy at a given moment may exasperate instead of checking the disease, and may even serve to perpetuate it in the blood."

This, although far from giving an adequate idea of the importance of his discoveries, or the difficulties which surrounded the subject, is yet gratifying as indicating the progress which his doctrines are making, and pointing to the position which he is destined to assume in the galaxy of bright names which adorn our art,

as a star of the first magnitude. By the side of Jenner he may be ranked, without fear of his fame being eclipsed.

Through the beaten field of syphilis we do not propose to follow our author. The unity of the poison—its effects when inoculated—the changes which time makes in its effects—the importance of the abortive treatment—the use of mercury in its earlier, and of iodine in its later stages—all these are too well known to need or bear repetition before well-informed members of the profession.

It is to the more difficult points that our attention is called. Can secondary syphilis be communicated by contamination of the secretions, without giving rise to local symptoms? This is answered affirmatively by Mr. Wilson, and he gives seven cases in proof.

Case seven is essentially this:—"A young man had a venereal sore, which was situated on the inner side of the prepuce. It got well in a few weeks, with the aid of a lotion of the sulphate of zinc, and he was not aware of any secondary symptoms having followed in its train." "Three years afterwards he had gonorrhœa, which lasted two months; and three years later he married." "A fortnight after marriage, the wife, who was a remarkably healthy woman, applied to me in consequence of suffering extreme soreness of the vulva, attended with a discharge. On making an examination, I found the clitoris and labia much swollen, an abrasion, with superficial ulceration of the mucous membrane in several places." This got well under the use of poultices and rest. Secondary symptoms, however, occurred.

This is regarded as an inoculation by the husband, from the sore which he had six years before, and which had left behind no sensible effects.

For ourselves, we cannot adopt this manner of regarding the case. It seems to us far more probable that the disease under which the woman labored was not syphilis, or if so, that it was produced by a fresh infusion. Every surgeon of experience knows how liable parties are to be deceived, and with what caution their statements are to be received as evidence in cases of this kind.

We regard this mode of communication as not proved, but as not by any means impossible. There is one way in which secon-

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dary syphilis may be conveyed; it is from the mother to her offspring *in utero*. But, in this case, its effects are well marked, and generally produce abortion. There is no analogy between this and the contaminating the secretions of the genital organs, in the way supposed.

There is another point in which we think Mr. Wilson generalises too hastily and too extensively. It is in regard to the permanence of the syphilitic poison, when once introduced into the system. He believes that it remains during life, and even is felt for several generations, being transmitted hereditarily. That such is the case in many instances cannot be doubted, but that it is invariably or generally so we see no reason to believe. On the contrary, by far the greater number of persons affected for a single time, and well treated, are permanently cured, and no effects of it are subsequently discernable.

The body of the work is devoted principally to the Syphilodermata, or the development of syphilis upon the skin. It is this part which constitutes its chief excellence. It must be admitted that he has succeeded in presenting these in a more natural arrangement, and giving a better view of their relations and modifying causes, than have been offered.

He regards the eruption and sore-throat as analogous to measles, scarlatina, and other exanthemata, as a febrile eruptive movement, resulting from an effort to expel the poison from the system.

If this attack is acute and not too severe, it produces the form of disease known as *Roseola syphilitica*, and which is a simple injection of the skin with dark-colored blood. When these stains subside, they leave behind the copper-colored spots called *Maculae syphiliticae*.

When the eruptive force is sufficiently powerful to elevate the pores, the case becomes one of syphilitic *Lichen*, or the papular form of syphilitic eruption. When the force is still greater, several pores and follicular plexuses are elevated together, which constitutes the *syphilitic tubercle*. The distinction between lichen and tubercle is only one of size.

All these spots of roseola, lichen, and tubercle, may be corymbose, circumscribed, disseminated, annular, etc., constituting their varieties. In particular constitutions they become pustular, which

adds another complication. The tubercles ulcerating, form syphilitic ulcers of various shapes, sizes, and numbers.

The roseolous form is that which occurs in recent inoculation, the tuberculous in ancient cases.

Such is an outline of Wilson's classification of the Syphilodermata, which he proceeds to fill up in a most concise manner, and which are illustrated by admirable colored plates.

In regard to the hereditary forms of syphilis, we have already said that our author regards them as vastly more frequent and persisting than is generally supposed or suspected. He regards Lupus as of this origin; and intimates that Scrofula, Psoriasis, and Lepra, may be due to the same cause. His remarks on these points are worthy of especial attention.

In treatment, Wilson in the main follows Ricord, using mercury, however, more freely, which, being of London, may be accounted for by his *environment*, although he distinctly admits that the disease may be cured without mercury, and states that this metal is not only useless, but injurious in all cases of tertiary symptoms.

In the work before us, the syphilitic poison is regarded as vastly more subtle, diffusive, and persisting, than has been suspected—as finding its way into the system without local or *primary* symptoms—as presenting itself under forms which have been named distinct diseases, and in subjects removed by generations from its source. The fainter and more delicate tints of the pictures are colored by the hand of a master.

It will be readily understood, that a large part of the human race are, in this view, brought directly or remotely under the influence of the disease, and that it is becoming more disseminated but milder in form. Prevention, therefore, is to be regarded as not less important than cure; and we subjoin some of the more essential points of our author's directions on this head:—

“The first condition of ‘taking’ the disease is the contact of morbid secretions with some part of the genital organs, either the mucous membrane or the skin: the time requisite for the continuance of the contact is probably very short, particularly in the case of the mucous membrane; but *time is necessary*, and upon this circumstance turns the most important of the rules of prevention, namely, *careful washing with soap and water*. This operation should be done well, and immediately after connection, and if it be

done well, I think it impossible that absorption can take place, that is, in the male. The female is placed in a position of greater difficulty than the male; the poison, in her case, is conveyed to a situation where washing must necessarily be imperfect. Injection, so far as the vagina is concerned, is her only resource; but so far as affects the external organs, where primary disease most commonly manifests itself, the powers of soap and water will be as potent for her, if properly used, as for the male.

"The best injection for the use of the female, in the case to which I am now referring, is weak vinegar and water. She should first wash with soap and water fully, perfectly, and abundantly, then inject the weak vinegar and water, and then bathe herself outwardly with the same fluid.—[Acids and alkalies possess the power of destroying the poisonous qualities of the syphilitic poison.]—The man should do the same, saving the injection, which is by no means necessary. In both, it is desirable to make water as soon after connection as may be, in order to wash the aperture of the urethra free from any secretion that may have settled there.

"The common situation of development of a venereal sore is among the folds of the prepuce, in the fossa coronæ glandis, and particularly in the smaller and more occult folds of the frænum. It may call for considerable care to expunge any morbid secretions from these situations, and the operation is not one that should be performed negligently or hastily. If a man have a venereal sore on the body of the penis, why, he richly deserves it; for nothing but gross neglect could have allowed the contact of the poisonous secretion for the length of time necessary for absorption, and particularly by the skin, which is not so apt at absorption as the mucous membrane. I have lately seen two instances, in which the sore was developed amongst the hair at the root of the penis. Here it is obvious that the washing had been imperfect, as not having reached that part, and probably the sufferers were not prepared for the development of a sore at so distant a point. This is only a reason for urging the application of the washing the most extensively possible.

"After the washing has been thoroughly effected, the organ should be made perfectly dry. otherwise the moisture left by the ablation may only serve to effect the solution of some undisturbed atom of the poison, and facilitate its absorption.—[In reference to the reproductive powers of the poison, Mr. Acton observes: 'To show the infinitesimal quantity of virus necessary for producing specific effects, one drop has been diluted with a pint of water, and the inoculated fluid has produced a pustule.']

"The power of oil of forming a kind of varnish to the skin, and preventing the contact of moisture for a time, might also be advantageously put in operation as a defence against the syphilitic poison, and as an antecedent, where careful washing is to follow as

a subsequent. But it must not be relied upon as a sole defence; nothing should be permitted to interfere with the after-action of the soap and water.

"Where a man is determined to rush into danger, the prepared cæcum of the sheep may be advised as a protection. It is one of great efficiency, and we are occasionally consulted under circumstances which render it necessary that we should be aware of the existence of such a remedy. The unexperienced may deride the suggestion, but the man of the world will appreciate its value."

D. B.

A Discourse on the Times, Character, and Writings of Hippocrates, read before the Trustees, Faculty, and Medical Class at the College of Physicians and Surgeons, at the opening of the term of 1852-53, by Elisha Bartlett. M. D., Professor of Materia Medica and Medical Jurisprudence.

THE opening of the sessions of the various Medical Colleges furnishes occasion for display of the literary talent of the several professors. Many of the introductions which we have received are creditable alike to their authors and the schools which they represent. If, however, we may be allowed to express our opinion, we should say that too much prominence is given to the evils which have crept into the profession, and too much time spent in dep'oring the disabilities under which we labor. The result is, that the non-medical, and, to a certain extent, the medical public have come to the conclusion that our art is deteriorated, and that our science is a tissue of speculations. To correct this, we want faithful pictures from early history, by which we may know the relations which the physician has sustained to, and the estimation in which he has been held by the masses of the people.

In the discourse of Professor Bartlett, we have introduced to our acquaintance the Father of Historic Medicine. We are sure that our readers will be gratified with the picture of the author; we therefore make no apology for the length of the extract.

"In one of the years of the 88th Olympiad, in the island of Thasos, fronting the Thracian city of Abdera, there was sadness in the house of Silenus, for its young master had been seized with sudden and alarming illness:—the fiery *causus* of the climate. . . . It is the third day of his disease; he has had a restless and distressed night, with some wandering of the mind; the symptoms are all worse in the morning, and his family and neighbors are anxious and alarmed. The occupations and order of the old Thracian household are interrupted and bro-

ken up. A fresh offering has been placed on the altar of the household Jove, standing in the centre of the inner court. The sound of the flute and the cithera has ceased; there is no animated talk of the last winners at the Isthmian or the Olympian games; the clatter of the loom and the domestic hum of the spinning-wheel are no longer heard; the naked feet of the slaves and the women fall carefully and silently upon the uncarpeted floors, and an unwonted stillness reigns throughout the numerous apartments of the dwelling. There is no savory steam of roasting wild-boar from the kitchen, and the fragrant Thracian wine stands untasted on the table, with a few plain barley-cakes and a little salt fish.

"Silenus lies in his sleeping chamber, in the quiet interior part of the house, adjoining the apartments of the women, farthest from the vestibule, and near to the garden. By the bed of the sick man, there is a small tripod stand, with a circular top, and upon it there is a statuette of Hercules, a bowl of warm barley-water, and a cup of oxymel.

"Leaning her head on the foot of the bed and sobbing, sits, on a low stool, a young Greek woman, beautiful in her features, and graceful in the flowing outlines of her person, as the Thessalian maidens of Homer. There is a picturesque combination of barbarian rudeness and Grecian elegance in her appearance, not an unfitting type and expression of the age and state of society in the midst of which she lived. Her feet and ankles are bare; she wears only a single garment—the long Ionic chiton of linen—with large sleeves reaching only a little below the shoulders, leaving uncovered, in their snowy whiteness, arms that might have rivalled those of the jealous queen of Olympus. A girdle fastens the robe loosely round a waist, like that of the Medician Venus, innocent of the deformities of buckram and whalebone. The light auburn hair is simply parted and carried back from the forehead, gathered in a knot on the crown of the head, fastened with a golden grasshopper, and held by a coil of golden net-work.

"At the head of the bed, watching steadfastly and earnestly the appearance of the patient, is seated his physician, the already celebrated son of Heraclides and Phenaretos, Hippocrates of Cos. He has just entered the apartment, to make his morning visit. His sandals have been taken off, and his feet washed by a slave in the vestibule. He wears over his linen tunic a large flowing mantle of light fine woolen, suited to the season, not unlike the later toga of the Romans, fastened at the neck with a cameo of Æsculapius, and falling in graceful folds nearly to his feet. His hair is long, and both this and his beard are kept and arranged with scrupulous neatness and care. He is thirty years old, in the very prime and beauty of early manhood. His features, through these misty shadows of many centuries, we cannot clearly distinguish, but we see that his face is dignified, thoughtful, and serene; and his whole

aspect, manner, and expression, are those of high, antique breeding, of refined culture, and of rather studied and elaborate elegance.

"His examination of his patient was long, anxious, and careful. He saw at once that the gravity and danger of the disease had increased since his last visit. He inquired very minutely into the manner in which the night had been passed; and was told by the watchers that the patient had had no sleep, that he had talked constantly, had sung and laughed, and had been agitated and restless. He found the hypochondria tumefied, but without much hardness. The stools had been blackish and watery, and the urine turbid and dark-colored. He noticed the temperature and feel of the skin, and he studied for a long time and with great solicitude the general manner and appearance, the decubitus, the breathing, the motions, and especially the physiognomy of the patient. The only circumstance in the examination that would have particularly attracted the attention of a modern witness of the scene, would have been his omission to feel the pulse. With this exception, no examination of the rational symptoms of disease could have been more thorough and methodical.

"Having satisfied himself as to the state of his patient, he retired to an adjoining room, followed by some of the attendants, to give directions in regard to the few simple remedies that he intended to use. The patient had already been bled, and had had a purgative of black hellebore. Hippocrates directed that, instead of the strained decoction of barley, which had been the patient's drink, he should now have honey and water—the favorite hydromel—that the bed should be made softer—the windows of the room still farther darkened, and that a warm flax-seed poultice, softened with olive-oil, should be applied to the abdomen.

"With a sad but decided expression of his fears as to the issue of the case, and a few kindly and pious words to the weeping wife, about the dignity, the solace, and the duty, in all our trials, of submission to the will of the gods, he gathered his mantle gracefully about him, had his sandals refitted by the slave who waited in the vestibule, and proceeded on his daily round of visits among the houses of the city."

The young physician of Thasos is next seen by the bedside of the dying Pericles.

"Philosophy, letters, and art, breathe in the quiet atmosphere of the room; and the taste of Aspasia sheds an Asiatic grace over its furnishing and its decorations. In one corner stands a statue of Minerva, from the chisel of Phidias; and the walls are covered with pictures, fresh from the pencils of Panæus and Polygnotus, illustrating the legendary and historic glories of Greece. There might have been seen Theseus, bearing off from the field of vic-

tory, on the banks of the Thermodon, the masculine and magnificent queen of the Amazons—half willing, perhaps, to be the captive of such a victor; Jason, in his good ship *Argo*, with his fifty selectest heroes, convoyed by the queen of love, the awful *Here*, and *Apollo*, winds his various and adventurous voyage, crowded with poetic imagery and romantic incident, and brings back the golden fleece from *Colchis*;—*Helen*, at her loom, is weaving into her 'golden web' the story of the Trojan wars;—the chaste *Penelope*, by the light of her midnight lamp, undoes the delusive labors of the day;—*Ulysses*, returned from his long wanderings, surveys once more, with boyish pride and delight, the dear old bow, which no arm but his could bend.

"Not often in the world's history has there met together a more august and illustrious company. There are a few of those whom we are able to recognise amongst them. Resting his head on the shoulder of *Socrates*, and sobbing aloud in unrestrained and passionate sorrow, leans the wild and reckless *Alcibiades*—just in the first bloom of that resplendent personal beauty which made him seem to the eyes, even of the Greeks, more like the radiant apparition of a young *Apollo*, than any form of mere earthly mould—subdued, for the first time in his life, and probably for the last—by the spectacle before him, of his dying relative and guardian—to reverence, tenderness, and truth. *Sophocles*, his old companion in arms, is there; and near him, in his coarse mantle, and with unsandaled feet, may have stood a grandson of *Aristides*, still poor with the honorable poverty of his great ancestor.

"Conspicuous amidst this group of generals, admirals, statesmen, orators, artists, poets, and philosophers,—in rank and fortune, in social position, in reputation, in learning, culture, and refinement, their equal and associate, sits the young physician of *Cos*. Already had his rising fame reached *Athens*, and when the city, overcrowded with the inhabitants of *Attica*, driven from their homes by the armies of *Sparta*, was smitten with the pestilence, he was summoned from his island home in the *Ægean*, to stay, if he could, the march of the destroying angel, and to succor with his skill those who had fallen under the shadow of its wings."

The titles of the works now regarded as from the pen of *Hippocrates* are:—

- " 1. Ancient Medicine.
- " 2. Prognosis.
- " 3. Aphorisms.
- " 4. Epidemics, 1st and 3d Books.
- " 5. Regimen in Acute Diseases
- " 6. Airs, Waters, and Places.
- " 7. Articulations.
- " 8. Fractures.

" 9. Instruments of Reduction.

" 10. Wounds of the Head.

" 11. The Oath.

" 12. The Law."

We have short notices of each of the works, with extracts from some of them, showing the condition of medicine in this earliest period of its history. We must close with one extract, which we commend to those who are constantly croaking about the degeneracy of our times, and the ignorance and inefficiency of the profession :—

"The science of medicine is, historically, twenty-two centuries old. Since its origin in Greece, four hundred years before the Christian era, it has never ceased to be cultivated, wherever any considerable degree of civilization has been reached. During all this long period, the science of medicine, like its kindred sciences of observation, has obeyed its own inherent and vital law of development. Subject always to its various and complicated relations; sometimes seduced or driven from its true path; sometimes obstructed or hindered in its march; sometimes dragged backward, it has still steadily struggled onward, obedient to the living principle of growth and progress within it. It has experienced the same vicissitudes; it has encountered the same obstacles and hindrances; it has achieved the same triumphs, as its sister sciences,—as astronomy, meteorology, geology, and chemistry; and the like common destiny of glory and beneficence awaits it and them.

"It is natural enough, when we look at the popular medical delusions of our day, and the skepticism as to the claims of medical science and art, which has seized upon the minds even of sensible and cultivated men,—that we should have some misgivings as to the permanency and stability of this science and art. But the great organic laws of nature are not to be suspended, nor reversed, nor turned aside. The lessons of twenty-two centuries are not to be forgotten, nor made to contradict themselves, for the first time, to-day. The science is constituted by the results of the toilsome and conscientious study of nature during these long centuries, recorded, systematized, and arranged; and as long as nature remains what it was two thousand years ago, and what it is to-day, these results will remain. The art is the practical application of the science; it has been the chief minister to sick and suffering humanity, in all ages, and amongst all civilized people; it is so to-day,—it will be so to-morrow. What has been will continue to be. The laws, ordained at the beginning, will still rule over us. The sun that shone upon Athens, and upon Pericles, shines still upon us; and it will continue to shine upon all who are to come after us. Spots may sometimes pass over its surface, but they do pass,

and they neither dim nor darken the radiance of its disc. Clouds and mists may intercept, for a season, its beams; but it is only for a season; and the Hand that hung it in the heavens will still maintain it there, to bless the future, as it has blessed the past, with its kindly and beneficent light." J.

General Pathology, as conducive to the Establishment of Rational Principles for the Diagnosis and Treatment of Disease; a course of Lectures delivered at St. Thomas's Hospital, during the summer Session of 1850; by JOHN SIMON, F.R.S. One of the Surgical Staff of that Hospital, and Officer of Health to the city of London. Pp. 212, Philadelphia, Blanchard & Lea.

THE small work with the above title, may be classed among those of the many medical books recently published, worthy of a place in a well selected medical library. In expressing this opinion we do not wish to be understood as recommending these lectures of Dr. Simon as a standard work on general pathology. This branch of medical science has made too many advances and embraces too many facts to admit of being treated of in a single volume, like the one before us, of two hundred pages.

Practitioners and students, who, for want of time cannot study more elaborate works, will find in these lectures all the more important facts and principles of pathology treated of, in a manner interesting to the reader and creditable to the author.

In his introductory remarks, Dr. Simon, after giving a definition of Pathology, shows, most conclusively, that no real advancement can be made in this important branch, only so far as the facts and conclusions are based upon anatomical, physiological, chemical and clinical observations, since the symptoms and products of disease must be determined by types of healthy structure and function.

"Blood in disease," is the subject dwelt upon at some length in the second lecture. It is evident that Dr. Simon, very properly, as we think, is inclined to attach more importance to the character and condition of this fluid than most other writers upon the same subject. According to our author, Blood disease may result either from ingestion of morbid products, or from the retention and accumulation in the blood of matters which ought to be excreted. The most marked instances in which the blood becomes morbid from ingesta are those of poisoning by the introduction into the blood of substances which, from their nature or constitution, tend to destroy or impair the vital functions. It is evident also that the

constituents of food might, under certain circumstances, such as in defective action in the assimilative organs, pass into the blood so imperfectly elaborated as to give rise to disease; so, too, pus globules and the germs of cancerous cells find their way into the circulating current, giving rise, in various parts, to the formation of abscess or the deposition of cancerous matter.

Blood may become diseased, also, from the accumulation and retention of excrementitious matters, such as should have been thrown out of the body by the excreting organs, such as the skin, liver, kidneys, &c.

In view of the fact that in the South and West, this accumulation of hydro-carbonaceous substances is favored by the high temperature and moist condition of an atmosphere more or less impregnated with carburetted hydrogen and other gases, the products of vegetable and animal decomposition, it is a question of interest and importance if, or not, this condition of the blood has an influence in modifying and producing periodic fevers. The color of the skin, conjunctiva, and even of the blood itself, would seem to indicate that the accumulation of carbon in the form, perhaps, of coloring matter, is one of the prominent pathological changes in this class of diseases. That such an accumulation is one of the causes of periodic fevers is evident also from the good effect of remedial agents, which, by exciting to action the liver, skin, kidneys, and other excreting organs, favor the excretion of hydro-carbonaceous matters.

Dr. Simon is fully up with the present time in his knowledge, not only of that branch upon which he professes to write, but also with the present advanced state of the science in general; hence, we can with confidence recommend the work before us as one of the best that has yet appeared on the subject. H.

Principles of Human Physiology with their principal applications to Psychology, Therapeutics, Hygiene, and Forensic Medicine, by WILLIAM CARPENTER, M.D., F.R.S., F.G.S., examiner in Physiology and Comparative Anatomy in the University of London, &c. Fifth American from the fourth and enlarged London edition, with three hundred and fourteen illustrations. Edited with notes and additions, by FRANCIS GURNE, SMITH, M.D., Professor of the Institutes of Medicine in the Medical Department of Pennsylvania College; lecturer on Physiology in the Philadelphia Association for Medical Instruction, &c. Philadelphia; Blanchard & Lea, 1853. pp. 1091.

No branch of the science of Medicine has made more rapid progress than Physiology, during the last few years; hence the ne-

cessity for a complete remodelling of such as had been standard works upon this subject, or new and more recent productions would take their places.

Dr. Carpenter seems determined to retain his position, as one of the leading physiologists of the age; if industry and perseverance in the study of his favorite branch will continue to secure to him, as it has thus far, this enviable distinction. The new edition before us is so enlarged and improved in every respect, as to present as full and comprehensive a view of modern physiology as can be found in our language.

With this work by Dr. Carpenter from which to acquire knowledge of the principles of Physiology, and Todd and Bowman's Physiological Anatomy as the structural basis of such knowledge, no physician at the present day should allow himself to fall in the rear in the modern march in physiological knowledge.

For sale by A. H. & C. Burley, Chicago.

H.

Clinical Lecture, in the U. S. Marine Hospital, by W. B. HERRICK, M. D.

THE constituents of food, having been prepared in the alimentary canal, are taken up by the lacteals and mesenteric veins, and thus introduced into the circulation, as noticed in a previous lecture. We have seen that food may be divided, for the sake of convenience, into three classes,—the protein, or nitrogenized compounds; the oily and amylaceous, or carbonaceous compounds; and the mineral compounds. We shall find it convenient to keep in view this classification, in speaking of the blood itself, the changes to which it is subject, and the relation of these changes to the fluids and solids without the blood-vessels. In order to the proper performance of the process of secondary assimilation, it is evident that the different organic and inorganic substances should be supplied in the proper relative proportions. These substances, with the exception, perhaps, of some of the inorganic constituents, can reach the solids and extra vascular fluids only through the blood; the existence, therefore, in this fluid of all the constituents of tissue properly combined and organized, is necessary to health, and deficiency or excess of one or more of these will give rise to morbid phenomena.

We propose to examine each of these classes of substances separately,—their function in health, and their influence in disease.

The body, as a whole, may be divided into three classes of substances, corresponding to those which we have already noticed in the food and blood; and it is an interesting fact, that this chemical division corresponds with a physiological classification—for, as we shall see, each of these classes has a different function.

We may assume that the use, so far as structure is concerned, of the minerals is to build up the skeleton; of the protein compounds to build up the muscular and fibrous tissues; and of the carbonaceous, to be deposited in the form of fat, to enter into the composition of the nervous structures, and to subserve the purposes of respiration. But in passing to their ultimate destination, they each have other offices to perform, and some of each are found in all the structures of the body. In the economy of nature, the fewest possible agents are made use of for the accomplishment of any given result; and it is, no doubt, true that, from the first introduction of food into the system until its final removal by the excreting organs, it exerts a marked influence over the nutritive processes. Blood itself may be regarded, in one sense as a tissue, subject to growth and decay. The corpuscles and the fibrin have been regarded by physiologists as possessed of vital properties. In regard to fibrin, we think there may be room for doubt; but that the organic cells existing in the blood are as much living as muscular or nervous matter, we think cannot be denied. The precise manner of their formation, whether as so many separate and distinct cells, built up independently of other organic forms, or whether, as is contended by some recent observers, they are the escaped nuclei of the white corpuscles, is perhaps uncertain; but it is important only to know the conditions of their growth and decay.

An organic cell is a product of the three classes of substances which we have noticed—fat, albumen, and salts. If oil be intimately mixed with an alkali, it is divided into minute particles; and if to this emulsion albumen be added, and the temperature be kept at from 96° to 100° F., there is formed around these oil granules a layer of albumen and the inorganic compounds, the whole resembling, so far as we can see, the organic cells of living tissues. Among other experiments and observations on this sub-

ject, we would refer to those reported in the first No. of the present volume of the *North-Western Med. and Surg. Journal*. It is only claimed, in regard to those experiments, that the forces acting in the mixture to produce celluloid bodies, are probably acting in the animal to give form and structure to the cellular element; and, in order that we may have growth of the blood, or of any other tissue, we must have combined at least these three kinds of substances. It is probable that the character of the cell may be modified by the relative proportions of its constituents, and also by the number and arrangement of its different elements. For instance, iron seems to have an influence in producing the blood corpuscles, while alkalies and the alkaline earths probably have a greater influence in the manufacture, so to speak, of the softer solids of the body.

In cases, therefore, where we have reason to believe there is a deficiency of the blood globules, we may administer with confidence the ferruginous preparations. You have seen the effects of this kind of medication in these cases of anæmia after intermittents which have fallen under your observation in the wards of this hospital. In order that the condition of the blood may be improved, both as regards its nutritive quality and its globular element, we prescribe, in connection with iron in some of its forms, a generous mixed diet, guarding carefully against any vice of primary assimilation, and especially favoring the solution and consequent absorption of as much nutritious material as possible, by giving the mineral acids.

There may be a condition of the blood opposite to that which I have just noticed. The corpuscles and albumen, one or both of them, may be in excess, and our indication will be to reduce them by venesection. You will observe that the volume of the circulating fluid is not diminished, but that its quality only is affected by bleeding. We must discriminate, therefore, between mere fulness of the vessels, and a relative excess of some of the constituents of the blood.

We have spoken of the minerals as stimulants to organization; they may probably be also regarded as possessing a preserving influence over the already formed structures, as we shall see when we come to speak of the nutrition and destruction of the solids of

the body. Changes are constantly taking place in the blood, dependent upon the substances introduced through the assimilative organs, from the extravascular tissues, and through the lungs; and the character of these changes will evidently be modified by any disturbance, relatively, of the amount of the substances introduced through these several channels. But perhaps none of them exert a more marked influence than oxygen. This agent seems to act in opposition to the mineral constituents, by furnishing the disorganizing force, reducing complex compounds to more simple ones, and thus favoring their elimination from the system. An excess or deficiency of this agent is, we believe, a prolific source of disease, and especially of alteration in the quality of the blood. It is probably true that a certain proportion of albumen is oxydized in the blood, and its products, urea and uric acid, eliminated by the kidneys. We think it not improbable that, as has been claimed by some observers, a diminution of the amount of oxygen may give rise to such a condition of the blood, that the albumen—unchanged, or, at least, but slightly modified—may pass into the renal tubuli, and thus we may have albuminuria. There are many facts which seem to sustain this idea. In nearly all conditions in which there is defective aeration of the blood, we find albumen in the urine, and this without any evidence of organic disease of the kidneys. This view is favored by the fact that, in diabetes, when there is an abundance of the hydro-carbonaceous element to divert the oxygen from the nitrogenized compounds, albumen is often found in the urine, and also that the urea in albuminous urine is below the normal standard.

There is another condition in which we may consider the hydro-carbonaceous element in excess—or the oxygen or blood globules, on which the amount of oxygen is dependent, deficient. We refer to a chylous condition of the blood, in which there is too much fat. We may evidently meet the indications in both of these conditions, by favoring the formation of blood corpuscles, and guarding against any vice in the performance of the function of respiration.